

# COPY

Atty. Dkt. No. 357000-1200

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Steven J. LOCKE and Devanand  
PINTO

Title: QUANTITATIVE ANALYSIS  
VIA ISOTOPICALLY  
DIFFERENTIATED  
DERIVATIZATION

Appl. No.: 10/621,958

Filing Date: 7/16/2003

Examiner: David J. Venci

Art Unit: 1641



<p><b>CERTIFICATE OF MAILING</b></p> <p>I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date below.</p> <p>_____ <i>Rene Campos</i> (Printed Name)</p> <p>_____ (Signature)</p> <p>_____ 5.06.05 (Date of Deposit)</p>
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**FIRST INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 CFR §1.56**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Submitted herewith on Form PTO/SB/08 is a listing of documents known to Applicants in order to comply with Applicants' duty of disclosure pursuant to 37 CFR §1.56.

A copy of each international patent document and each non-patent document is being submitted to comply with the provisions of 37 CFR §1.97 and §1.98.

Also submitted is a copy of the International Search Report from a PCT Application related to the above-noted application, PCT/CA03/01072.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present

application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.

### **TIMING OF THE DISCLOSURE**

The listed documents are being submitted in compliance with 37 CFR §1.97(c), before the mailing date of either a final action under 37 CFR §1.113, a notice of allowance under 37 CFR §1.311, or an action that otherwise closes prosecution in the application.

### **RELEVANCE OF EACH DOCUMENT**

All of the documents are in English.

Applicants respectfully request that each listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP §609.

### **FEE**

A fee in connection with submission of an information disclosure statement under 37 CFR §1.97(c) in the amount of \$180.00 in accordance with 37 CFR §1.17(p) is attached.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 CFR §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 50-0872. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even

entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit  
Account No. 50-0872.

Respectfully submitted,

Date May 5, 2005

FOLEY & LARDNER LLP  
Customer Number: 38706  
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Facsimile: (650) 856-3710

By Lorna L. Tanner  
Lorna L. Tanner  
Attorney for Applicant  
Registration No. 50,782

Substitute for form 1449B/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

**Date Submitted: May 6, 2005**

(use as many sheets as necessary)

**Complete if Known**

Application Number	10/621,958
Filing Date	7/16/2003
First Named Inventor	Steven J. LOCKE
Group Art Unit	1641
Examiner Name	David J. Venci
Attorney Docket Number	357000-1200

Sheet 1 of 3

## U.S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

[illegible]

**Examiner  
Signature**

Date  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Application Number	10/621,958
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		Group Art Unit	1641
		Examiner Name	David J. Venci
		Attorney Docket Number	357000-1200
Sheet	3	of	3

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
	C14	Goshe et al. "Phosphoprotein Isotope-Coded Affinity Tag Approach for Isolating and Quantitating Phosphopeptides in Proteome-Wide Analyses" <i>Anal. Chem.</i> 73:2578-2586 (2001)	
	C15	Molloy et al. "Phosphopeptide Derivatization Signatures To Identify Serine and Threonine Phosphorylated Peptides by Mass Spectrometry" <i>Anal. Chem.</i> 73:5387-5394 (2001)	
	C16	Gygi et al. "Quantitative analysis of complex protein mixtures using isotope-coded affinity tags" <i>Nature Biotech.</i> 17:994-999 (1999)	
	C17	Oda et al. "Accurate quantitation of protein expression and site-specific phosphorylation" <i>Proc. Natl. Acad. Sci. USA</i> 96:6591-6596 (1999)	
	C18	Goodlett et al. "Differential stable isotope labeling of peptides for quantitation and <i>de novo</i> sequence derivation" <i>Rapid Commun. Mass Spectrom.</i> 15:1214-1221 (2001)	
	C19	Mirgorodskaya et al. "Quantitation of peptides and proteins by matrix-assisted laser desorption/ionization mass spectrometry using <sup>18</sup> O-labeled internal standards" <i>Rapid Commun. Mass Spectrom.</i> 14:1226-1232 (2000)	

Examiner Signature		Date Considered	
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	C1	Heller, et al. "Synthesis of Biologically Active Tritiated Amylin and Salmon Calcitonin Analogues" <i>Analytical Biochemistry</i> 285:100-104 (2000)		
	C2	Sechi et al. "Modification of Cysteine Residues by Alkylation. A Tool in Peptide Mapping and Protein Identification" <i>Anal. Chem</i> 70:5150-5158 (1998)		
	C3	Cahill et al. "Analysis of relative isotopologue abundances for quantitative profiling of complex protein mixtures labeled with the acrylamide/D <sub>3</sub> -acrylamide alkylation tag system" <i>Rapid Commun. Mass Spectrom.</i> 17:1283-1290 (2003)		
	C4	Gehanne et al. "Quantitative analysis of two-dimensional gel-separated proteins using isotopically marked alkylating agents and matrix-assisted laser desorption/ionization mass spectrometry" <i>Rapid Commun. Mass Spectrom.</i> 16:1692-1698 (2002)		
	C5	Hsu et al. "Stable-Isotope Dimethyl Labeling for Quantitative Proteomics" <i>Anal. Chem.</i> 75:6843-6852 (2003)		
	C6	Munchbach et al. "Quantitation and Facilitated de Novo Sequencing of Proteins by Isotopic N-Terminal Labeling of Peptides with a Fragmentation-Directing Moiety" <i>Anal. Chem.</i> 72:4047-4057 (2000)		
	C7	Smith et al. "Rapid quantitative measurements of proteomes by Fourier transform ion cyclotron resonance mass spectrometry" <i>Electrophoresis</i> 22:1652-1668 (2001)		
	C8	Weckwerth et al. "Comparative quantification and identification of phosphoproteins using stable isotope labeling and liquid chromatography/mass spectrometry" <i>Rapid Commun. Mass Spectrom.</i> 14:1677-1681 (2000)		
	C9	Ji et al. "Strategy for qualitative and quantitative analysis in proteomics based on signature peptides" <i>J. of Chromatography B</i> 745:197-210 (2000)		
	C10	Wang et al. "Proteomics based on selecting and quantifying cysteine containing peptides by covalent chromatography" <i>J. of Chromatography A</i> 924:345-357 (2001)		
	C11	Geng et al. "Signature-peptide approach to detecting proteins in complex mixtures" <i>J. of Chromatography A</i> 870:295-313 (2000)		
	C12	Yao et al. "Proteolytic <sup>18</sup> O Labeling for Comparative Proteomics: Model Studies with Two Serotypes of Adenovirus" <i>Anal. Chem.</i> 73:2836-2842 (2001)		
	C13	Conrads et al. "Quantitative Analysis of Bacterial and Mammalian Proteomes Using a Combination of Cysteine Affinity Tags and <sup>15</sup> N-Metabolic Labeling" <i>Anal. Chem.</i> 73:2132-2139 (2001)		

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